

LIVE BIRTHS: State Summary

LIVE BIRTHS

INTRODUCTION

Purpose of Surveillance

A *live birth* is a birth that shows any sign of life after delivery, irrespective of the duration of pregnancy. Sign of life includes breathing, heartbeat, pulsation of the umbilical cord, definite movement of voluntary muscles, or any other evidence of life, whether or not the umbilical cord has been cut or the placenta is attached.

Birth certificates serve as legal records of birth and identification, and provide surveillance data used to monitor fertility trends, population composition and growth, and patterns in prenatal and postnatal conditions that affect the immediate and future health of newborns and mothers. Information monitored through birth surveillance includes adequacy of prenatal care, obstetric procedures, complications during delivery, method of delivery, and infant birthweight. Examination of surveillance data helps identify mothers and infants at high risk of poor outcome, so that research, educational efforts, and services can be effectively targeted to reduce this risk.

Source of Data: Certificate of Live Birth

The birth section of this report is based on live births that occurred to Louisiana residents during the 1998 calendar year. The *Certificate of Live Birth* is the source document for these data. All original birth certificates flow to the Vital Records Registry in New Orleans.

Data are recorded on birth certificates by birth attendants. Louisiana law requires that the birthing facility or attendant send the original birth record to the Vital Records Registry within fifteen days of birth, and that the identities of persons included in the birth registry be kept confidential.

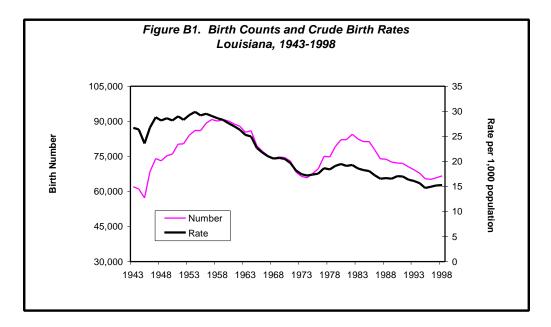
Unless otherwise noted, all statistics reported here are for births to Louisiana residents, regardless of the state in which the birth occurred. The Vital Statistics Cooperative Program, a nationwide system of information interchange among all states and territories, makes possible the reporting of out-of-state births to Louisiana residents.

As a result of the 1991 implementation of Louisiana's Electronic Birth Certificate (EBC) program, approximately 85% of all births are reported electronically by the hospital at which the birth occurred. Matching of infant death certificates with the corresponding birth certificates indicates that birth registration in Louisiana is approximately 97% complete.

BIRTH COUNTS AND RATES

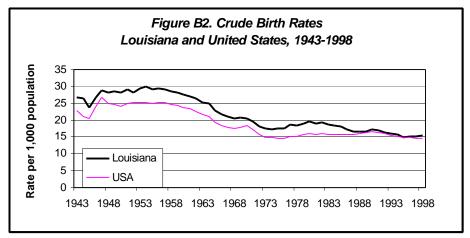
Birth Counts and Crude Birth Rates

- In 1998, there were 66,773 live births to Louisiana residents, a slight increase from the 65,947 Louisiana resident births in 1997 (up 1.25%) (Figure B1, Table B1). At the national level there was a slight increase (up 1.56%) in the number of births between 1997 and 1998 (Figure B2, Table B1).
- The crude birth rate was 15.3 live births per 1,000 population. This rate was similar to both the 1997 Louisiana rate (15.2) and the 1998 national rate (14.6) (Figures B1 and B2, Table B1).



The *crude birth rate* measures the number of live births in a population during a given period of time. It is calculated by dividing the number of live births in a population during one year by the total population, then multiplying the quotient by 1,000. The rate is expressed as the number of live births per 1,000 total population. Birth rates are affected by the number and age distribution of women of childbearing age. Because crude birth rates relate the number of live births to the total population in an area, without regard to the age or sex distribution of the population, they are useful in projecting population changes in the area.

Louisiana's crude birth rate historically has been higher than the national birth rate, although it has mirrored the national birth rate pattern since the 1960s. Despite a slight upturn over the past three years, the state's crude birth rate has declined 21.5% since 1980. During this same period, the national rate has declined 8.2%. The trends have resulted in a convergence of the national and state rates during the 1990s (Figure B2, Table B1).



Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

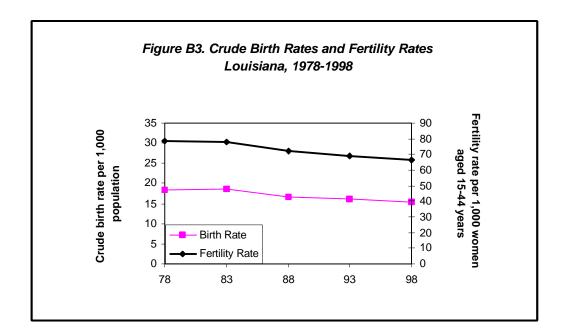
	Table B1. Birth Counts, Percent Changes, and Crude Birth Rates Louisiana and United States, 1943-1998												
		Louisiana		United S		otatoe	, 1010 10	Louisiana		United	States		
Year	Number	% Change from Previous Year	Rate*	%Change from Previous Year	Rate*	Year	Number	% Change from Previous Year	Rate*	% Change from Previous Year	Rate*		
1943	62005	6.73%	26.7	3.85%	22.7	1971	73014	-2.15%	19.7	-4.70%	17.2		
1944	61050	-1.54%	26.4	-5.32%	21.2	1972	68340	-6.40%	18.2	-8.37%	15.6		
1945	57363	-6.04%	23.6	-2.76%	20.4	1973	66413	-2.82%	17.5	-3.73%	14.8		
1946	68549	19.50%	26.8	19.35%	24.1	1974	65880	-0.80%	17.2	0.73%	14.8		
1947	74166	8.19%	28.8	11.90%	26.6	1975	67792	2.90%	17.4	-0.50%	14.6		
1948	73104	-1.43%	28.2	-4.72%	24.9	1976	69678	2.78%	17.6	0.75%	14.6		
1949	75302	3.01%	28.6	0.33%	24.5	1977	74989	7.62%	18.7	5.01%	15.1		
1950	76108	1.07%	28.2	-0.47%	24.1	1978	74831	-0.21%	18.4	0.20%	15.0		
1951	80256	5.45%	29.0	5.18%	24.9	1979	79183	5.82%	19.1	4.83%	15.6		
1952	80476	0.27%	28.3	2.33%	25.1	1980	82114	3.70%	19.5	3.37%	15.9		
1953	84108	4.51%	29.3	1.28%	25.1	1981	82167	0.06%	19.1	0.00%	15.8		
1954	86225	2.52%	29.9	2.83%	25.3	1982	84531	2.88%	19.3	0.47%	15.9		
1955	86031	-0.22%	29.2	0.64%	25.0	1983	82416	-2.50%	18.6	1.41%	15.6		
1956	89333	3.84%	29.5	2.76%	25.2	1984	81428	-1.20%	18.3	-1.13%	15.6		
1957	90786	1.63%	29.1	2.14%	25.3	1985	81401	-0.03%	18.1	0.83%	15.8		
1958	90175	-0.67%	28.6	-1.26%	24.5	1986	77944	-4.25%	17.3	2.49%	15.6		
1959	90814	0.71%	28.3	0.94%	24.2	1987	73952	-5.12%	16.6	-0.11%	15.7		
1960	90126	-0.76%	27.6	-0.66%	23.7	1988	73887	-0.09%	16.7	1.41%	16.0		
1961	88892	-1.37%	27.0	0.25%	23.3	1989	72639	-1.69%	16.6	2.63%	16.4		
1962	88005	-1.00%	26.3	-2.37%	22.4	1990	72121	-0.71%	17.1	3.36%	16.7		
1963	85334	-3.04%	25.3	-1.66%	21.7	1991	72080	-0.06%	17.0	2.90%	16.3		
1964	86060	0.85%	25.0	-1.72%	21.1	1992	70502	-2.19%	16.4	-1.14%	15.9		
1965	79533	-7.58%	22.7	-6.63%	19.4	1993	69328	-1.67%	16.1	-2.69%	15.5		
1966	77223	-2.90%	21.8	-4.10%	18.4	1994	67802	-2.20%	15.7	-1.19%	15.2		
1967	75199	-2.62%	21.0	-2.37%	17.8	1995	65574	-3.29%	14.7	-1.35%	14.8		
1968	74098	-1.46%	20.6	-0.55%	17.6	1996	65186	-0.59%	15.0	-0.21%	14.7		
1969	74770	0.91%	20.7	2.82%	17.9	1997	65947	1.17%	15.2	-0.27%	14.5		
1970	74615	-0.21%	20.5	3.64%	18.4	1998	66773	1.25%	15.3	1.56%	14.6		

^{*} Rate per 1,000 population

Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

Fertility Rates

- The fertility rate was 66.6 births per 1,000 women age 15-44. The United States' fertility rate in 1998 was 65.6 births per 1,000 women aged 15-44 (Figure B3, Table B2).
- Despite a slight increase since 1997, Louisiana's fertility rate has declined steadily since the early 1980s. As
 with the crude birth rate, the fertility rate has been declining since the 1980s in both Louisiana and in the
 United States (Figure B3, Table B2).

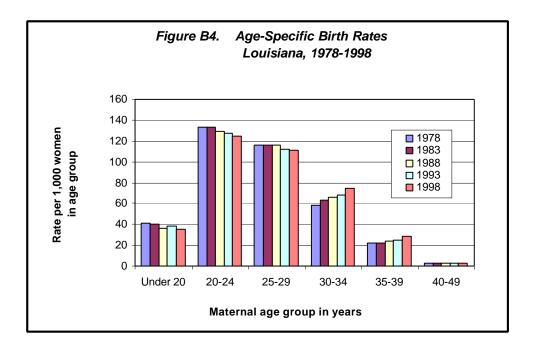


The *fertility rate* relates the total number of births (to women of all ages) in a population to the number of women most likely to bear children - those 15 through 44 years of age. The rate is calculated by dividing the total number of live births during one year by the population of women aged 15 through 44 years, then multiplying the quotient by 1,000. The rate is expressed as the number of live births per 1,000 women aged 15 through 44 years. Because fertility rates focus only on women in the prime childbearing years, they are more useful than crude birth rates in controlling for differences in age distribution among women who give birth. These rates are useful for comparisons of fertility among age, racial, and socioeconomic groups.

MATERNAL PROFILE

Age of Mother

- The youngest mother was 12 years of age at the time of birth and the oldest mother was 47.
- Although Louisiana's overall birth and fertility rates have declined since the 1980s, age-specific birth
 rates have increased for women aged 30-39, and have remained stable for women aged 40 and older.
 The decrease in overall rates appears to have occurred mostly in women under the age of 30, suggesting
 a shift toward older women giving birth (Figure B4, Tables B2 and B3). This shift is comparable to the national
 trend in age-specific birth rates.



The *age-specific birth rate* measures the number of live births in a specific age group during a given period of time. The rate is calculated by dividing the number of births to mothers in a particular age group during one year by the total female population in that age group, then multiplying the quotient by 1,000. The age-specific birth rate is expressed as the number of live births per 1,000 women in that particular age group. Because childbearing occurs most often in the early adult years, a woman's age is a very important factor when examining birth trends. Age-specific birth rates make valid comparisons among age groups possible because the scope of each rate is limited to a narrow age range, thereby greatly reducing the effect that age might have on the number of births being described.

	Table B2. Crude Birth Rates, Fertility Rates, and Age-Specific Birth Rates Louisiana, 1978-1998												
Crude Fertility Age-Specific Birth Rate*** by Maternal Age Group													
Year	Birth Rate*	Rate**	Under 15 [†]	- 146-10 20-24 26-20 20-24 26-20 40-44									
1978	18.4	78.8	2.2	2.2 74.9 133.6 115.5 58.7 21.7 5.3									
1983	18.6	77.6	2.0	74.1	132.9	115.9	63.6	21.9	4.3	0.2			
1988	16.7	72.2	2.2	68.4	129.8	116.0	65.8	23.8	4.4	0.2			
1993	1993 16.1 69.0 2.4 75.8 127.0 112.1 68.3 25.0 4.6 0.2												
1998	15.3	66.6	1.9	65.2	124.4	111.2	74.3	28.6	4.7	0.2			

^{*}Rate per 1,000 population

Birth Order

- Since 1990, Louisiana's first-birth rate dropped 3.6%, from 27.8 to 26.8 first births per 1,000 women aged 15-44. During the same time period, the United States rate dropped 9.0%, from 29.0 to 26.4 (Table B3).
- Since 1991, changes in first-birth rate trends by the age of the mother have become apparent. Rate for teens aged 15-19 has dropped steadily, while rates for women in their thirties have risen steadily (Table B3).

	Table B3. First Birth Rates* by Maternal Age Louisiana and United States, 1990-1998											
				Ма	ternal A	ge Gro	ир					
. V	Under								-44			
Year	15**	15-19	20-24	25-29	30-34	35-39	40-44	Louisiana	United States			
1990	2.3	54.6	56.9	36.6	14.3	3.9	0.5	27.8	29.0			
1991	2.5	55.4	56.6	35.7	13.2	3.7	0.5	27.4	28.3			
1992	2.2	55.0	55.0	35.4	13.5	3.9	0.5	27.1	27.8			
1993	2.3	56.0	55.3	34.8	14.2	4.0	0.6	27.2	27.5			
1994	2.3	55.0	54.6	35.3	15.1	4.2	0.7	27.2	27.5			
1995	1.9	53.3	52.6	36.6	15.8	4.4	0.7	27.0	27.3			
1996	2.1	2.1 50.8 52.0 36.9 16.9 4.4 0.8 26.7 26.8										
1997	1.8	50.4	51.5	36.8	17.2	4.9	0.8	26.7	26.5			
1998	1.8	50.0	51.9	35.8	17.5	5.3	0.7	26.8	26.4			

^{*}First birth per 1,000 women in specified age group

National Center for Health Statistics

The *first-birth rate* measures the number of first births to mothers in a particular age group. The rate is calculated by dividing the number of first births to mothers in a particular age group by the total female population in that age group, then multiplying the quotient by 1,000. It is expressed as the number of births per 1,000 women in that age group. First-birth rates are helpful in assessing changes over time in the age at which women begin bearing children.

Table B4 presents detailed counts of birth order by the age and race of the mother.

^{**}Rate per 1,000 women aged 15-44 years

^{***}Rate per 1,000 women in age group

^{*}Numerator = all live births to mothers under 15 years of age; denominator = female population 10-14 years of age.

^{**}Numerator = all live births to mothers 45 and older; denominator = female population 45-49 years of age.

^{**}Numerator = all live births to mothers under 15 years of age; denominator = female population 10-14 years of age. Source: Louisiana State Center for Health Statistics

	Table B4. Counts of Live Births by Birth Order, Maternal Age, and Maternal Race Louisiana, 1998													
						Materi	nal Age (Group				Percent		l
Birth Order	Race	Total	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.	of All Live Births	Mean Age of Mother	Median Age of Mother
All	All*	66773	305	11989	20415	16952	11307	4933	839	27	6	100.0		
<u> </u>	White	37910	57	4811	10339	11105	7794	3268	516	18	2	56.8	=	
	Black	27424	247	7013	9774	5389	3189	1510	291	8	3	41.1	23.8	21.9
1	All*	27186	301	9199	8517	5464	2669	910	121	4	1	40.7	-	20.9
	White Black	16092 10469	57 243	3982 5082	5130 3214	4156 1128	2012 563	668 207	84 31	3 1	-	24.1 15.7		22.8 19.0
2	All*	21648	243 4	2324	7154	6206	4228	1509	213	7	3	32.4		25.5
2	White	13093	-	757	3684	4350	3112	1040	143	6	1	19.6		26.7
	Black	8093	4	1544	3378	1710	987	405	62	1	2	12.1		22.7
3	All*	11041	-	392	3276	3289	2576	1278	226	3	1	16.5	27.8	26.9
	White	6039	-	66	1253	1894	1814	865	145	2	-	9.0		28.8
	Black	4777	-	320	1992	1297	708	385	73	1	1	7.2		
4	All* White	4154 1834	-	63 5	1067 221	1222 528	1030 583	660 430	108 65	4 2	-	6.2 2.7		27.9 30.8
	Black	2247	_	57	840	672	420	216	40	2	_	3.4		
5	All*	1526	-	8	299	452	429	272	63	3	-	2.3		29.5
	White	543	-	-	43	127	175	159	37	2	-	0.8		32.0
	Black	946	-	8	256	315	238	105	23	1	-	1.4		27.6
6	All*	586	-	-	71	177	165	127	43	3	-	0.9		30.8
	White Black	158 418	_	_	5 66	31 145	48 115	57 64	16 27	1	_	0.2 0.6		33.8 29.0
7	All*	315	_		20	94	97	82	22	-		0.5		31.5
	White	62	_	_	-	8	24	22	8	-	_	0.1		33.8
	Black	249	-	-	20	85	72	60	12	-	-	0.4		30.0
8	All*	135	-	-	3	26	49	39	18	-	-	0.2		33.5
	White Black	30 104	-	-	3	4 22	5 43	12 27	9 9	-	-	0.0 0.2		37.3 31.9
			_	-	ა					-	_			
9	All*	56	-	-	-	5	24	19	8	-	-	0.1		33.9
	White Black	7 49	_	_	_	1 4	2 22	2 17	2 6	_	_	0.0 0.1		33.4 33.8
10	All*	32	_			6	11	12	3	_		0.0	•	32.4
	White	6	-	-	-	-	2	3	1	-	-	0.0		37.2
	Black	26	-	-	-	6	9	9	2	-	-	0.0	33.7	32.3
11	All*	17	-	-	1	3	3	7	2	1	-	0.0		34.9
	White Black	2 14	-	-	-	1 2	-	1 6	- 1	-	-	0.0		26.0
12	All*	7			1		3	4				0.0	1	34.8 34.8
12	White	1	_	_	_	_	-	1	_	_	_	0.0		38.0
	Black	6	-	-	-	-	3	3	-	-	-	0.0		
13	All*	4	-	-	-	-	1	1	2	-	-	0.0	38.8	35.0
	White	-	-	-	-	-	-	-	-	-	-	- 0.0	- 27.0	- 25.0
14	Black All*	3		-	-	-	1	1	1		-	0.0		35.0 39.0
14	White	-	_	_	_	_	<u>'</u>		_	_	_	0.0	. 30.0	39.0
	Black	3	-	-	-	-	1	1	1	-	-	0.0	38.0	39.0
15	All*	2	-	-	-	-	-	1	1	-	-	0.0	40.5	38.0
	White	-	-	-	-	-	-	-	-	-	-		-	-
10 :	Black	2	-	-	-	-	-	1	1	-	-	0.0		38.0
16 +	All* White	1 1	-	-	-	-	-	1 1	-	-	-	0.0 0.0		38.0 38.0
	Black	'	_	-	-	-	_	'	_]	-	0.0	30.0	30.0
Unk.	All*	60	-	3	7	8	21	10	8	2	1	0.1	32.1	31.7
	White	42	-	1	3	5	17	7	6	2	1	0.1	33.3	32.7
	Black	18	-	2	4	3	4	3	2	-	-	0.0	29.3	29.3

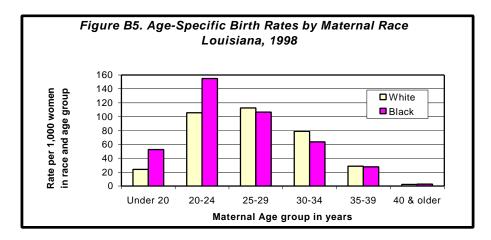
^{* &}quot;All Races" contains white, black, and other.

Race of Mother

• Of the 66,773 births to Louisiana residents, 37,910 (56.8%) were to white mothers, 27,424 (41.1%) to black mothers, and 1,439 (2.2%) to mothers of other races (Table B5).

7	Table B5. Counts of Live Births by Maternal Age and Race Louisiana, 1998												
	Maternal Age Group												
Race	Race Under 15-19 20-24 25-29 30-34 35-39 40-44 45 & All Ages												
White	57	4811	10339	11105	7794	3268	516	18	37910				
Black	247	7013	9774	5389	3189	1510	291	8	27424				
Other	Other 1 165 302 458 324 155 32 1 1439												
All Races	305	11989	20415	16952	11307	4933	839	27	66773				

• Age-specific birth rates for all race groups peaked in the mothers' twenties (Figure B5, Table B6).



The fertility rate of 78.8 births per 1,000 black women aged 15 through 44 years was higher than the rate of 59.6 in white women (Table B6). The racial disparity in fertility rates resulted from the rate at which births occurred to women under the age of 25, where age-specific birth rates for blacks were much higher than those for whites and other races. After the age of 25, age-specific birth rates for whites and blacks were comparable (Figure B5, Table B6).

Table B	Table B6. Crude Birth Rates, Fertility Rates, and Age-Specific Birth Rates by Maternal Race Louisiana, 1998											
Page	Race Crude Birth Fertility Age-specific Birth Rates*** by Maternal Age Group											
Kace	Rates* Rates** Under 15-19 20-24 25-29 30-34 35-39 40-44 45 & Older**											
White	13.1	59.6	0.6	45.0	105.6	112.5	78.6	28.4	4.4	0.2		
Black	19.5	78.8	3.8	95.7	154.8	106.4	63.4	27.6	5.2	0.2		
Other	Other 19.3 77.4 0.3 44.9 98.1 147.1 118.6 52.0 10.6 0.4											
All Races	15.3	66.6	1.9	65.2	124.4	111.2	74.3	28.6	4.7	0.2		

^{*}Rate per 1,000 Population

^{**}Rate per 1,000 women aged 15-44 years

^{***}Rate per 1,000 women in age group

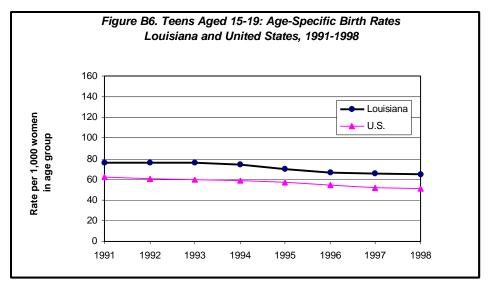
^{*}Numerator = all live births to mothers under 15 years of age; denominator = female population 10-14 years of age.

^{**}Numerator = all live births to mothers 45 and older; denominator = female population 45-49 years of age.

Teen Births

A teen birth is defined as a birth to a woman under the age of 20 years. Despite an overall decrease in teen birth rates over the last two decades, teenage pregnancy continues to be a problem for the nation. When compared with mothers in other age groups, teen mothers are less likely to receive adequate prenatal care and are more likely to give birth to low birthweight infants. These infants are more likely to be hospitalized and go on to have childhood health problems. Nationally, most (76%) births to teens occur outside of marriage, and 25% of teenage mothers go on to have more children within the next two years. These factors, combined with the fact that teenage mothers are less likely to finish high school, contribute to the high proportion of women living in poverty who first gave birth during adolescence. In 1993, of the 3.8 million mothers nationwide aged 15-44 who received welfare or Aid to Families with Dependent Children (AFDC), 55% first became mothers as teenagers.³ In fiscal year 1995, Louisiana spent over \$875 million on programs that support families begun by teens (in the form of AFDC, Food Stamps, WIC, and Medicaid). In contrast, Louisiana spent only \$5.7 million on programs designed to prevent teenage pregnancy.

- There were 12,294 live births to Louisiana residents under the age of 20 years (Table B5).
- The birth rate for teens aged 15-19 years was 65.2 births per 1,000 women aged 15-19. This rate is 27.6% higher than the national rate of 51.1 (Figure B6, Table B7).
- Reflecting the national trend, teen birth rates in Louisiana for the 15-19 years age group have declined during the 1990s (Figure B6, Table B7).



Source: Louisiana State Center for Health Statistics National Center for Health Statistics

¹ Lewis CT, Mathews TJ, Heuser RL. Prenatal Care in the United States, 1980-94. National Center for Health Statistics. Vital Health Stat 21(54).

The Alan Guttmacher Institute. Sex and America's Teengers. 1994.

³ The Alan Guttmacher Institute. *Issues in Brief.* February 1995.

⁴ Kreutzer, Tracy A. Expenditures and Investments: Adolescent Pregnancy in the South. Volume II. 1997, Southern Regional Project on Infant Mortality. Washington, DC.

Tab	Table B7. Teens: Age-Specific Birth Rates* by Maternal Age Louisiana and United States, 1978-1998										
		Louisiana		United States							
Year	Under 15 [†]	15-19 Years	Under 20	15-19 Years							
1978	2.2	74.9	40.8	51.5							
1983	2.0	51.4									
1988	2.2	68.4	36.2	53.0							
1993	2.4	75.8	38.2	59.6							
1994	2.3	74.4	37.8	58.9							
1995	2.0	70.0	36.0	56.8							
1996	2.2	67.0	35.4	54.4							
1997	1.8	66.1	35.4	52.3							
1998	1.9	65.2	35.4	51.1							

^{*}Rate per 1,000 women in age group

denominator = female population 10-14 years of age.

Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

- The birth rate for black teens aged 15-19 years was more than twice that of white teens, at 95.7 versus 45.0 births per 1,000 women aged 15-19, respectively (Figure B7, Table B8).
- The ratio of black to white births decreased as age increased. Black teenagers under the age of 15 gave birth more than six times as frequently as white teenagers of the same age, while blacks 18-19 years old gave birth less than twice as frequently as white teenagers of the same age (Figure B7, Table B8).

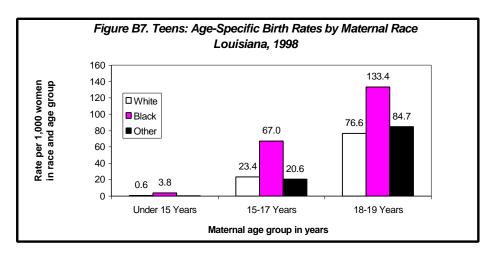


Table B8.	Table B8. Teens: Age-Specific Birth Rates* by Maternal Race Louisiana, 1998											
Maternal Age-Specific Birth Rates by Maternal Race												
Age Group	Age Group White Black Other All Races											
Under 15	0.6	3.8	-	1.9								
15-17	23.4	67.0	20.6	40.2								
18-19	76.6	133.4	84.7	100.3								
15-19	45.0	95.7	44.9	65.2								
10-19 24.1 52.4 24.3 35.4												

^{*}Rate per 1,000 women in race and age group

^{*}Numerator = all live births to mothers under 15 years of age;

[&]quot;-" indicates rate is unstable due to small number of live births (<20)

• Teenage mothers entered prenatal care in a timely manner less frequently (Table B9) and gave birth to low birthweight infants more frequently (Table B10) than mothers of all ages combined.

Table B9	Table B9. Teens: Counts and Percents* of Live Births to Mothers Entering Prenatal Care in the First Trimester, by Maternal Race Louisiana, 1998											
	Maternal Race Maternal White Black All Races ⁺											
Age	Number Percent Number Percent Number Percent											
Under 15	31	31 55.4 114 46.5 145 48.0										
15	108	62.8	242	52.3	352	55.0						
16	319	71.4	534	57.9	866	62.6						
17	629	73.5	885	63.7	1533	67.4						
18	1108	77.5	1291	66.5	2434	70.9						
19	1515	80.5	1526	67.5	3077	73.3						
10-19	3710 76.6 4592 63.6 8407 68.7											
All Ages	33813	89.5	19685	72.1	54704	82.3						

^{*}Percent of live births in the specific maternal age group

^{*&}quot;All Races" includes white, black, and other

	Table B10. Teens: Counts and Percents* of Live Births Under 2500 Grams by Maternal Race Louisiana, 1998											
	Maternal Race											
	Maternal White Black All Races [†]											
Age	Number Percent Number Percent Number Percent											
Under 15	5 8.8 45 18.2 51 16.7											
15	14	8.1	88	19.0	102	15.9						
16	39	8.7	159	17.1	200	14.3						
17	89	10.3	230	16.5	322	14.1						
18	104	7.2	291	14.9	400	11.6						
19	150	7.9	361	15.9	513	12.2						
10-19	10-19 401 8.2 1174 16.2 1588 12.9											
All Ages	2639	7.0	4013	14.6	6768	10.1						

^{*}Percent of live births in the specific maternal age group

Education

- 75.5% of Louisiana's live births were born to mothers with a minimum of a high school education (Table B11).
- 66.3% of black infants, and 82.2% of white infants, were born to mothers with a minimum of a high school education (Table B11).

^{*&}quot;All Races" includes white, black, and other

Table B11.	Table B11. Counts and Percents of Live Births by Maternal Education and Race Louisiana, 1998											
		Numb	er		Pe	ercent* of	Live Birth	S				
Educational Level	White	Black	Other	All Races	White	Black	Other	AII Races				
No high school	1302	1139	133	2574	3.4	4.2	9.2	3.9				
Some high school	5445	8083	245	13773	14.4	29.5	17.0	20.6				
High school	14043	10989	474	25506	37.1	40.1	32.9	38.2				
Some college	7933	5093	249	13275	20.9	18.6	17.3	19.9				
College graduate	College graduate 9152 2098 338 11588 24.2 7.7 23.5 17.4											
Total	37875	27402	1439	66716	100.0	100.0	100.0	100.0				

^{*}May not sum to 100 due to rounding error

Marital Status

The percent of unmarried women among all women giving birth is influenced by economic, peer, and self-perception issues that affect both the rate at which women marry and the number of married and unmarried women giving birth. Marital status can affect social, human, and financial resources available to children. It often is used as an indicator for important health and social outcomes.

- There were **29,940 live births to unmarried mothers. This represents 44.8% of all 1998 live births** in Louisiana (Table B12).
- Very young mothers were the most likely to be unmarried, with close to 100% of all mothers under the age
 of 15 being unmarried (Figure B8, Table B12).
- Black mothers were unmarried more than three times as frequently as white mothers were. The
 greatest racial disparity in marital status was seen in mothers aged 30-34, where blacks were more than five
 times as likely as whites to be unmarried (Figure B8, Table B12).

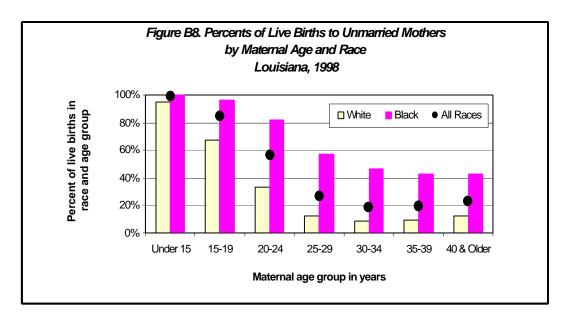


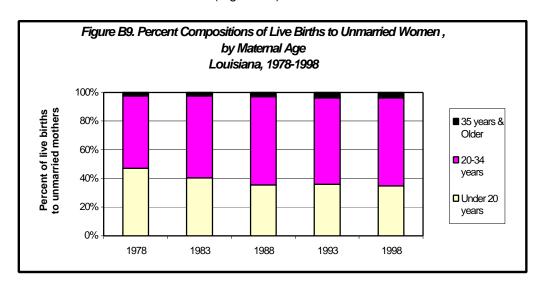
Table I	Table B12. Percents of Live Births to Unmarried Mothers by Maternal Age and Race Louisiana, 1998												
Maternal	Maternal Age Group												
Race	Under 15	Inder 15 15-19 20-24 25-29 30-34 35-39 40 & Older All Ages											
White	94.7	94.7 67.5 33.5 12.5 8.4 9.6 12.4 24.2											
Black	100.0	96.3	81.9	57.6	46.3	42.8	42.5	74.2					
Other	Other 100.0 80.6 43.4 18.6 11.4 9.0 15.2 28.2												
All Races	99.0	84.5	56.8	27.0	19.2	19.7	22.9	44.8					

- The annual proportion of live births that occur to unmarried mothers in Louisiana has doubled in the last two decades (Table B13).
- This increase has occurred in every age group, but can be seen most clearly in mothers in their twenties, where the percentage of live births to unmarried women in Louisiana has almost tripled in the past 20 years (Table B13).

	Table B13. Percents of Live Births to Unmarried Mothers by Maternal Age Louisiana and United States, 1978-1998													
	Louisiana United States													
Year	Orider 20-24 25-20 20-24 25-20 ^{40 G}								40 & Older	All Ages				
1978	49.6	21.2	10.5	9.6	13.5	15.7	22.9	44.9	16.4	6.9	5.6	7.4	9.6	16.3
1983	55.7	25.7	13.8	11.5	13.9	15.3	25.3	54.1	22.9	11.0	8.6	10.1	13.4	20.3
1988	70.8	39.3	19.8	15.4	16.1	18.9	33.5	65.9	32.9	15.8	11.8	12.8	15.6	25.7
1993	80.6	49.2	26.5	20.2	20.9	22.4	42.0	73.5	42.8	19.6	13.5	14.1	16.3	31.1
1998	84.9	56.8	27.0	19.2	19.7	22.9	44.8	78.9	47.7	22.5	14	14.4	16.7	32.8

Source: Louisiana State Center for Health Statistics National Center for Health Statistics

Over the past 20 years, there has been an upward shift in the ages of unmarried mothers. In 1978
teenagers aged less than 20 years accounted for almost 50% of live births to unmarried mothers. This year
they accounted for 34.8% of these births (Figure B9).



Although the actual number of births to women age 35 and older is fairly small, the proportion of women in this age group who are unmarried when they give birth has increased steadily over the past 20 years. In 1978 2.5% of births to unmarried mothers occurred in the 35 and older age group. By 1998, this figure had risen to 3.9% (Figure B9). These changes reflect the national trend of older mothers giving birth outside of marriage.

Prenatal Care

Prenatal care is recognized as an important means of providing medical, nutritional, and educational interventions to reduce the risk of adverse pregnancy outcomes, such as infant mortality and low birthweight, and to identify women at high risk for these outcomes. It has been estimated that for every dollar spent on prenatal care, up to \$3.38 can be saved on direct medical costs.⁵ Beyond the positive effect on birth outcomes, prenatal care is a vital part of women's health care, as many women (particularly adolescents, minorities, and women of low socioeconomic status) first enter the health care system during pregnancy.⁶

In Louisiana, adequacy of prenatal care is measured by a *modified Kessner index*. This index defines prenatal care as adequate if the first prenatal visit occurred in the first trimester of pregnancy, and if the total number of visits was appropriate to the gestational age of the baby at birth. However, because these measures assess neither the quality nor the content of prenatal care, they must be recognized only as estimates of the adequacy of the care.

- Of the 65.815 Louisiana residents who had one or more live births, 76.9% received adequate prenatal care (Table B14).
- Black mothers were less likely to receive adequate prenatal care than white mothers were (Table B14).
- Teenage mothers were less likely to receive adequate prenatal care than older mothers were (Table

	Table B14. Percents of Mothers Delivering Live Births and Receiving Adequate Prenatal Care*, by Maternal Age and Race Louisiana, 1998											
	Maternal Age Group											
Maternal Race Under 20 20-24 25-29 30-34 35-39 Older All Ag												
White	70.7	82.3	89.7	91.3	89.9	84.9	85.5					
Black	55.7 63.9 72.4 74.7 71.5 68.5 65.1											
All Races**	61.7											

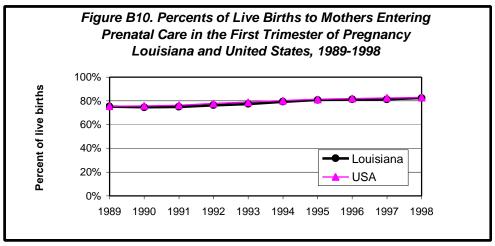
^{*}Adequate Prenatal Care as defined by a modified Kessner index

^{**&}quot;All Races" includes white, black, and other

⁵ Institute of Medicine. (1985). *Prenatal care and low birthweight: Effects on health care expenditures.* In: Preventing Low Birthweight. (pp. 212-37) Washington, DC: National Academy Press.

6 Fiscella, K. (1995). Does prenatal care improve birth outcomes? A critical review. Obstetrics & Gynecology 85, 468-79.

• In both Louisiana and the United States, the percentage of live births to mothers entering prenatal care in the first trimester has increased steadily since the early 1990s (Figure B10, Table B15).



Source: National Center for Health Statistics

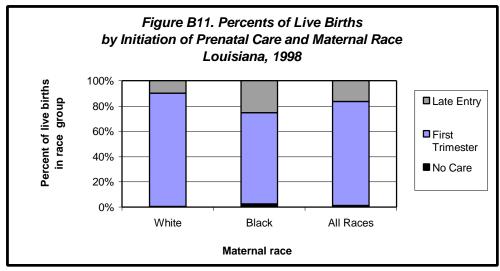
Enter	Table B15. Percents of Live Births to Mothers Entering Prenatal Care in the First Trimester of Pregnancy Louisiana and United States, 1978-1998											
Year	Year Louisiana United States											
1978	75.1	74.9										
1983	78.3	76.2										
1988	1988 74.3 75											
1993	77.4	78.9										
1994	79.2	80.2										
1995	80.7	81.3										
1996	81.1	81.9										
1997	81.3	82.5										
1998	82.3	82.8										

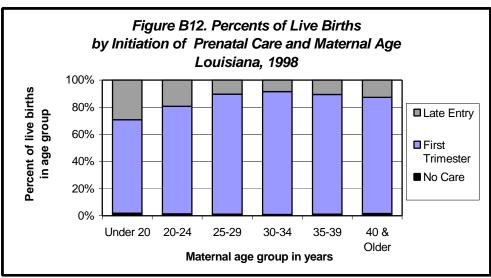
Source: National Center for Health Statistics

• Racial differences in timeliness of entry into prenatal care were observed in both Louisiana and the United States. In Louisiana, these differences were slightly more pronounced (Table B16).

	Table B16. Percents of Live Births to Mothers Entering Prenatal Care in the First Trimester of Pregnancy, by Maternal Race Louisiana and United States, 1998									
Maternal Race	Louisiana United States									
White	89.5	84.8								
Black 72.1 73.3										
All Races* 82.3 82.8										

*"All Races" includes white, black, and other Source: Louisiana State Center for Health Statistics National Center for Health Statistics Blacks were less likely than whites to enter into prenatal care in the first trimester (Figure B11, Table B17), and teens were less likely than mothers age 20 and older (Figure B12, Table B17).





Late Entry: Entering in second or third trimester

Table	Table B17. Percents of Live Births by Initiation of Prenatal Care, Maternal Age, and Maternal Race Louisiana, 1998											
Matamal		No Care		Firs	st Trimest	er	Seco	nd Trime	ster	Thir	er	
Maternal Age Group	White	Black	All Races*	White	Black	AII Races*	White	Black	AII Races*	White	Black	All Races*
Under 20	0.9	2.7	2.0	76.6	63.6	68.7	19.4	28.2	24.7	3.2	5.5	4.6
20-24	0.6	2.5	1.5	86.6	71.2	79.2	11.4	21.4	16.2	1.5	4.8	3.1
25-29	0.6	2.3	1.1	93.2	78.5	88.5	5.4	15.8	8.8	0.8	3.4	1.6
30-34	0.4	2.6	1.0	94.6	80.7	90.4	4.6	14.0	7.4	0.5	2.8	1.2
35-39	0.5	3.1	1.3	93.0	77.2	88.0	5.7	16.0	9.0	0.8	3.7	1.7
40 & Older	0.8	3.1	1.6	91.2	74.9	85.4	7.5	19.0	11.5	0.6	3.1	1.4
All Ages	0.6	2.6	1.4	89.5	72.1	82.3	8.7	20.9	13.8	1.2	4.4	2.5

^{*&}quot;All Races" includes white, black, and other

Medical Risk Factors for the Pregnancy

The birth attendant records medical risk factors on the birth certificate by checking any of 16 listed risk factors, none, or other. More than one risk factor can be recorded on a birth certificate. There were 109 birth certificates for which medical risk factor for the pregnancy was unknown.

- Pregnancy-associated hypertension was the most frequently reported risk factor among Louisiana residents giving birth, at a rate of 32.6 per 1,000 mothers who had 1 or more live births during the calendar year (Tables B18 and B19).
 - Black mothers experienced pregnancy-associated hypertension at a higher rate than white mothers did. The rate among black mothers was 34.0 occurrences per 1,000 black mothers, versus the rate of 32.1 occurrences per 1,000 white mothers (Tables B18 and B19).
- The second most frequently reported medical risk factor was anemia, at a rate of 24.2 occurrences per 1,000 mothers who had 1 or more live births during the calendar year (Tables B18 and B19).
 - Black mothers experienced anemia at a rate of 30.2 occurrences per 1,000 black mothers, which was much higher than the rate among white mothers at 19.8 occurrences per 1,000 white mothers (Tables B18 and B19).
- The third most frequently reported medical risk factor was diabetes, at a rate of 15.8 occurrences per 1,000 mothers who had 1 or more live births during the calendar year. This includes juvenile onset, adult onset, and gestational diabetes during pregnancy (Tables B18 and B19).
 - White mothers experienced diabetes at a higher rate than black mothers. The rate in white mothers was 18.0 occurrences per 1,000 white mothers, versus 12.7 occurrences per 1,000 black mothers (Tables B18 and B19).

Medical risk factors reported on the birth certificate differed somewhat by age, with very young and old mothers reporting at higher rates.

- Among teenage mothers (younger than 20 years old at the time of birth), the most frequently reported medical risk factors were (Tables B18 and B19):
 - Pregnancy-associated hypertension, with 35.7 occurrences per 1,000 mothers
 - Anemia, at a rate of 26.9 occurrences per 1,000 mothers
 - Hydramnios/Oligohydramnios, with 10.8 occurrences per 1,000 mothers
- Among mothers 35 years and older, the most frequently reported medical risk factors were (Tables B18 and B19):
 - Pregnancy-associated hypertension, with 36.3 occurrences per 1,000 mothers
 - **Diabetes**, at a rate of 35.6 occurrences per 1,000 mothers
 - Anemia, with 20.3 occurrences per 1,000 mothers.

Table B18. Rates* of Medical Risk Factor of the Pregnancy, by Maternal Race or Age Louisiana, 1998									
	III Ages		All Races [†]						
Medical Risk Factor of the Pregnancy	All Races⁺	White	Black	Under 20 Years	35 Years & Older				
No medical risk factor noted	780.0	803.0	745.8	782.4	735.0				
Hypertension, pregnancy associated	32.6	32.1	34.0	35.7	36.3				
Anemia (HCT <30 \ HGB <10)	24.2	19.8	30.2	26.9	20.3				
Diabetes	15.8	18.0	12.7	3.4	35.6				
Hydramnios/Oligohydramnios	7.6	5.3	10.8	10.8	8.1				
Previous preterm or small for gestational age infant	7.0	6.8	7.3	3.7	9.0				
Hypertension, chronic	6.6	4.3	9.8	2.1	19.9				
Previous infant >=4000 Grams	5.9	8.0	3.1	ı	10.0				
Eclampsia	4.5	3.2	6.2	7.5	-				
Genital herpes	4.2	4.3	4.0	2.9	5.3				
Uterine bleeding	3.7	4.1	3.0	3.5	3.5				
Rh sensitization	3.5	5.3	1.3	2.5	5.6				
Incompetent cervix	1.6			-	-				
Cardiac disease	1.4	1.5	1.5		-				
Renal disease	1.4	1.0	2.0	1.9	-				
Acute or chronic lung disease	0.8		1.0	-	-				
Hemoglobinopathy	0.3	-	-	-	-				

^{*}Rate per 1,000 mothers who had 1 or more live births during the calendar year *"All Races" includes white, black, and other

[&]quot;-" indicates rate is unstable due to low frequency (<20)

Table	Table B19. Counts* of Medical Risk Factor of the Pregnancy, by Maternal Age and Race Louisiana, 1998															
								Ма	ternal A	Age Gro	рир					
Medical Risk Factor	Race	Total	Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
	All	51285	215	489	1081	1781	2708	3257	9316			8579		567	17	4
No medical risk factor noted	White	29968	44	144	372	694	1178	1522	3910	8335		6063	_	361	11	1
No medical risk factor floted	Black	20147	171	341	697	1064	1479	1686	5267	7311	3940	2245	1019	187	5	2
	Other	1170	-	4	12	23	51	49	139	239	376	271	124	19	1	1
	All	1593	7	16	44	49	85	127	321	563	383	204	98	15	2	-
Anomia (HCT 220/HCP 210)	White	740	1	5	12	21	31	52	121	237	199	114	62	4	2	-
Anemia (HCT<30/HGB <10)	Black	816	6	11	32	27	51	74	195	313	175	80	36	11	-	-
	Other	37	-	-	-	1	3	1	5	13	9	10	-	-	-	-
	All	95	-	1	1	3	3	2	10	29	16	21	16	2	1	-
Cardian dianan	White	55	-	-	-	1	2	1	4	14	11	14	9	2	1	-
Cardiac disease	Black	40	-	1	1	2	1	1	6	15	5	7	7	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	All	52	-	-	-	3	7	4	14	12	13	7	3	3	-	-
A	White	23	-	-	-	1	2	1	4	5	8	5	-	1	_	-
Acute or chronic lung disease	Black	28	-	-	-	2	5	3	10	7	5	2	3	1	-	-
	Other	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	All	1040	-	1	3	5	12	21	42	196	312	288	168	32	2	
	White	670	-	1	2	1	8	15	27	116		204	104	16		-
Diabetes	Black	343	-	-	1	4	4	6	15	79	101	79	56	13	-	-
	Other	27	-	-	-	-	-	-	-	1	10	5	8	3	-	-
	All	275	-	-	2	7	10	16	35	69	80	61	25	5	-	-
	White	161	_	-	1	1	6	6	14	28		38		4	_	
Genital herpes	Black	109	_	-	1	6	4	10	21	39		23		l 1	_	
- 1	Other	5	i -i	- i	-	-	-1	-	-	2		_	l i	i -	-	

^{*}This is not an unduplicated count because more than one medical risk factor was noted on some birth certificates. 65815 women had 1 or more live births during the calendar year. (Table B19 continues on the next page)

Table B19 (Table B19 (continued). Counts* of Medical Risk Factor of the Pregnancy, by Maternal Age and Race Louisiana, 1998															
								Ма	ternal /	Age Gro	oup					
Medical Risk Factor	Race	Total	Under 15	15	16	17	18	19	15-19		25-29	30-34	35-39	40-44	45 & Older	Unk.
	All	497	7	6	6	28	42	43	125		87	67	33	13	-	-
Hydramnios/Oligohydramnios	White	198		1	2	4	11	18			34	33	19	8	-	-
,	Black	292 7	7	5	4	24	30 1	25	88 1		50 3	33	13 1	4	-	-
	Other All	23			1	2	3	2	8		5	4	2	1		_
	White	4	_	_		-	-	-	-	1	1	1	1	'	_	_
Hemoglobinopathy	Black	19	-	_	1	2	3	2	8		4	3	1	1	-	_
	Other	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
	All	432	2	-	3	3	7	11	24		105	117	88	24	1	-
Hyportonoion obronio	White	162	-	-	1	1	3	6			41	46	24	8		-
Hypertension, chronic	Black	266	2	-	2	2	4	5	13		64	71	63	16	-	-
	Other	- 4	-	-	-	-	-	4.40	400	3	-	-	170	-	-	-
Hypertension, pregnancy	All White	2144 1199	13 2	22 4	50 15	99 36	111 44	140 61	422 160		563 371	352 217	172 94	32 24	2	-
associated	Black	919		4 17	33	61	65	77	253		188			8		
associated	Other	26	- '-	1	2	2	2	2	9		4	5	4	-	-	_
	All	293	4	8	10	18	28	23	87		65	41	15	2	1	-
Colomnoia	White	120	-	1	5	4	10	6			39	19		_	1	_
Eclampsia	Black	167	4	7	5	13	18	17	60		24	22	9	2	-	-
	Other	6	-	-	-	1	-	-	1		2	-	1	-	-	-
	All	107	-	-	3	1	3	3			28	30	9	4	-	-
Incompetent cervix	White	48	-	-	1	1	-	1	3		11	19		1	-	-
·	Black Other	58	-	-	2	-	3	2	7	19	16 1	11	2	3	-	-
	All	386			_	2	5	4	11	80	124	114	52	5		
	White	300	_	_	_	1	4	2	7		97	89	48	5	_	_
Previous infant 4000+ grams	Black	84	-	-	-	1	1	2	4		26	24	4	-	-	-
	Other	2	-	-	1	-	-	-	-	-	1	1	-	-	-	1
	All	460	-	3	2	7	11	22	45	158	126	80	46	5	-	-
Previous preterm or small	White	254	-	2	-	3	3	10			82	51	32	4	-	-
for gestational age infant	Black	197	-	1	2	4	8	12	27		41	26	13	1	-	-
	Other	9	-		-	-	- 40	-	-	2	3	3		-	-	-
	All White	93 36	_	_	5	4 2	10 4	4	23 6		21 12	5 2	7 3	1	_	_
Renal disease	Black	53	_	_	5	2	6	3	16		9	3	2	1		_
	Other	4	-	_	-	_	-	1	1		_	_	2	_	-	-
	All	231	1	2	3	6	10	9	30	72	58	38	31	1	-	-
	White	196	1	_	3	3	9	8	23		53	34	28	1	_	_
Rh sensitization	Black	35		2	_	3	1	1	7		5	4	3	_	_	_
		33		۷	_	3	'		,	10	3	1	3			_
	Other	244	-	-	-	-	- 10	- 11	- 40	- 67	-	- 4E	-	-	-	-
	All	241		5	3	8	12	14			66			-	-	-
Uterine bleeding	White	153		2	1	3	9	5			50			-	-	-
g	Black	80	1	3	1	5	3	9	21	27	13	12	6	-	-	-
	Other	8			1		-		1		3					
	All	8985	68	110	202	304	460	588	1664	2698	2113	1518	745	171	7	1
	White	4188	10	16	41	92	148	205	502	1077	1175	924	401	95	4	_
Other	Black	4648		94	161	212	306	379	1152							1
				5-4												
	Other All	149 61	1		-	-	6 2	4	10		48 13		18 9			-
				-	2		2	1	6						-	
Unknown medical risk factor	White	42	1	-	1	1	-	-	2	10	9		6	2	-	1
	Black	19	-	-	1	-	2	1	4	4	4	3	3	1	-	-
	Other	-	-	-	-	-	-	-	-	-	-		-	-	-	-

^{*}This is not an unduplicated count because more than one medical risk factor was noted on some birth certificates. 65815 women had 1 or more live births during the calendar year.

Tobacco and Alcohol Use During Pregnancy

Usage of tobacco and alcohol during pregnancy, as reported by the mother at the time of birth, is recorded on the birth certificate. Because this information depends on the mother's recall, it is subject to inaccuracies in reporting.

- 10.3% of mothers who provided information reported using tobacco during pregnancy, and 0.6% reported using alcohol during pregnancy (Table B20).
 - Among whites, 14.2% reported using tobacco, and 0.5% reported using alcohol.
 - Among blacks, tobacco and alcohol use were reported to be 5.2% and 0.8%, respectively.

U	Table B20. Counts of Mothers by Use of Tobacco and Alcohol during Pregnancy, Maternal Age, and Maternal Race Louisiana, 1998															
								М	aternal	Age Gro	оир					
Substance Usage	Race	Total	Under 15	15	16	17	18	19		20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
	All White	58945 32015	295 50	598 137	1288 366		3010 1089		10588 3712		15151 9714		4261 2807	721 445	22 13	4 1
No tobacco use	Black Other	25587 1343	244 1	456 5	909 13		1868 53	2152 50	6733 143	9197 274	5004 433	2847 312	1307 147	245 31	8 1	2 1
	All White	6777 5296	9	40 34	96 81	252 210	413 344	479 391	1280 1060	2270 1831	1506 1211	1039 745		102 62	4	1
Tobacco use	Black Other	1404 77	3	6	13 2	37 5	61 8	82 6	199 21	417 22	275 20	286	183	40	-	1
	All White	93 52	1	-	2	4	4	6 2	16		17 9	19 12		3	-	1
Unknown tobacco use	Black Other	41	- -	-	1	1	3	4	9	12	8	7	3	2	-	- -
	All	65307	302	637	1382	2258	3414	4147	11838	20051	16570	10961	4751	806	24	4
No alcohol use	White Black	37128 26761	54 247	171 461	447 920	851 1381	1429 1924		4763 6912	10181 9574	10888 5230		3146 1452	498 277	15 8	
	Other	1418	1	5	15	26	61	56	163	296	452	320	153	31	1	1
Alcohol use	All White	399 179	2 2	1	3	6 2	7	10 4	27 9	74 36	85 35		37	17 9	2 2	
Alcohol use	Black Other	219 1	-	1 -	3	4 -	4 -	6	18 -	38 -	49 1	70 -	35 -	8 -	-	1
Unknown alcohol use	All White	109 56	1 1	-	1	4 2	6 2	8 2	19 7	29 15	19 11	24 13	7	3 1	-	1
OTINIOWIT ALCOHOL USE	Black Other	52 1	-	-	-	1 1	4 -	6	11 1	14 -	8	11 -	6 -	2	-	-

NEWBORN PROFILE

<u>Sex</u>

Louisiana's male/female birth ratio was 1.041, which means 1,041 males were born for every 1,000 females. By race, the male/female ratios were 1.043 for whites, 1.033 for blacks, and 1.154 for other races (Table B21).

Table B21. Counts of Live Births by Infant Sex and Maternal Race Louisiana, 1998											
	Maternal Race										
Infant Sex	nfant Sex White Black Other All Races										
Male	19357	13936	771	34064							
Female	Female 18553 13488 668 32709										
Male/Female Ratio 1.043 1.033 1.154 1.041											

Birthweight

A *low birthweight* infant is defined as an infant weighing less than 2500 grams (5 pounds, 8 ounces) at birth. Low birthweight is a major cause of infant mortality, with more than three-quarters of infant deaths caused by babies born too small or too early. Low birthweight has been linked to several preventable factors, including lack of prenatal care, maternal smoking, use of alcohol and other drugs, and pregnancy before the age of 18 years. Other risk factors for low birthweight include low socioeconomic level, low maternal weight gain, low pregnancy weight, first births, female sex, short maternal stature, prior low birthweight births, maternal illnesses, fetal infections, and a variety of metabolic and genetic disorders.

Low birthweight infants who survive are more likely than normal weight infants to have brain damage, lung and liver disease, subnormal growth, developmental problems, and other adverse health conditions. The effects of low birthweight follow these infants throughout life, through a greater likelihood of learning disorders, attention disorders, and developmental impairments. A higher proportion of low birthweight infants go on to be enrolled in special education classes than their normal birthweight counterparts.

• 6,768 (10.1% of total live births) of the infants born to Louisiana residents weighed less than 2500 grams. In the United States, 7.6% of infants born in the United States were low birthweight (Tables B22 and B26).

⁷ Paneth NS. (1995) *The problem of low weight*. In The Future of Children, Low Birth Weight (19-34).

⁸ Institute of Medicine. (1985). *The significance of low birthweight*. In: Preventing low birthweight. (pp. 21-45). Washington, DC: National Academy Press.

⁹ Hack M, Klein NK, Taylor HG. *Long-term developmental outcomes of low birth weight infants*. The Future of Children, Low Birth Weight 1995;5:19-34.

 With an exception of 1998, both Louisiana and the nation have seen an increase in the percentage of infants born with low birthweight in recent years (Table B22).

Table B22. Percents of Live Births Less Than 2500 Grams Louisiana and United States, 1993-1998											
Year	Year Louisiana United States										
1993	9.4	7.2									
1994	9.6	7.3									
1995	9.7	7.3									
1996	9.9	7.4									
1997	10.2	7.5									
1998	10.1	7.6									

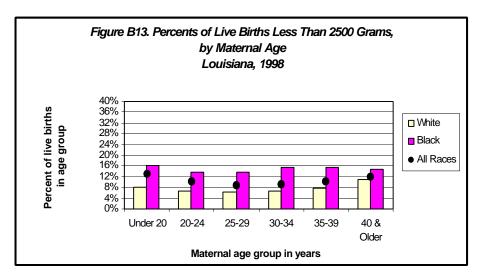
Source: Louisiana State Center for Health Statistics National Center for Health Statistics

Black mothers gave birth to infants of low birthweight more than twice as frequently as white mothers, at 14.6% compared with 7.0% of live births. This discrepancy held true for all age groups (Figure B13, Tables B23 and B24). This relationship between low birthweight and race also is seen at the national level (Table B23).

Table B23. Percents of Live Births Less Than 2500 Grams by Maternal Race Louisiana and United States, 1998										
	Maternal Race									
Location	White	Black	All Races*							
Louisiana	Louisiana 7.0 14.6 10.1									
United States 6.5 13.0 7.6										

*"All Races" includes white, black, and other Source: Louisiana State Center for Health Statistics National Center for Health Statistics

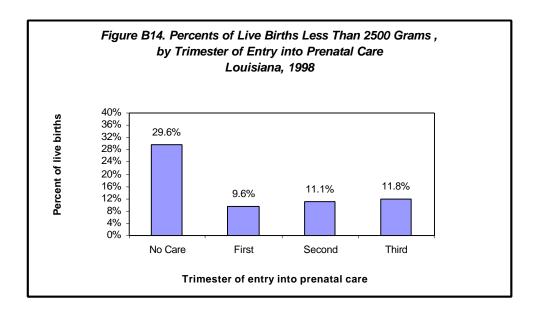
Among the maternal age groups, **mothers aged under 20 had the highest percentage of low birthweight babies** (12.9% of live births) (Figure B13, Table B24).



Tak	ole B24. Pe	rcents of Li		ess Than 250 ana, 1998	00 Grams, by	Maternal A	ge								
Maternal Age Group															
Race	Under 20														
White	8.2	6.8	6.4	6.5	7.8	10.9	7.0								
Black	16.2	5.2 5.0 5.0 5.0													
All Races*	12.9	10.2	8.7	9.0	10.3	11.9	10.1								

^{*&}quot;All Races" includes white, black, and other

- 29.6% of births to mothers who had no prenatal care were low birthweight (Figure B14).
- For mothers who received prenatal care, mothers who entered prenatal care in the secondary or third trimester had higher percent of low weight births than the mothers who entered prenatal care in the first trimester (Figure B14).



Infants weighing less than 1500 grams at birth (3 lbs. 5 oz.) are considered to be *very low birthweight* and are at much greater risk of mortality and long-term disability than higher weight infants. Although recent medical advances have greatly reduced the risk of death for smaller infants, the risk of early death for a very low birthweight infant is about 65 times that of infants who weigh at least 1500 grams.¹⁰

• 2.1% of infants born to Louisiana residents weighed less than 1500 grams (Table B25), as compared with 1.4% of infants born to United States residents.

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¹⁰ Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Report of final natality statistics, 1995. Monthly vital statistics report; vol 45 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1997.

- As with infants weighing less than 2500 grams, the frequency of very low birthweight births differed by race and age group.
 - Black mothers gave birth to very low birthweight infants three times as frequently as white mothers, at 3.5% compared with 1.2% of live births (Table B25).
 - Infants born to young mothers of all races were more frequently very low birthweight. Of all infants born to mothers under the age of 20, 2.5% were very low birthweight (Table B25).

Table B25. F	Percents of		s Less Tha uisiana, 19		ams, by Mate	ernal Age									
Maternal Age Group															
Race	Under 20	,													
White	1.2	1.2	1.1	1.2	1.5	1.2									
Black	3.4 3.2 3.6 4.2 3.6 3.5														
All Races*	2.5	2.2	1.9	2.1	2.2	2.1									

^{*&}quot;All Races" includes white, black, and other

Tables B26 through B28 present detailed breakdowns of birthweight by live birth order, maternal race and age, and infant sex.

		Tal	ble B26. C	Counts of	Live Birth Louis	s by Live siana, 199		er and Bir	thweig	ıht		
				E	Birthweight	In Grams					Births	Percent
Birth Order	Total	999 and less	1000 through 1999	2000 through 2499	2500 through 2999	3000 through 3499	3500 through 3999	4000 through 4499	4500 and over	Weight not stated	Under 2500 Grams	of Total Live Births
All	66773	741	1953	4074	13128	25503	16581	4081	699	13	6768	10.14
1	27186		753		5641	10656	6409	1472	209		2794	10.28
2	21648	194	579	1145	3905	8301	5817	1441	266		1918	8.86
3	11041	112	342	699	2084	4172	2780	726	124		1153	10.44
4	4154	55	152	270	900	1437	1005	280	55		477	11.48
5	1526	27	67	133	315	527	336	94	26	1	227	14.88
6	586	7	24	54	138	194	129	31	9	-	85	14.51
7	315	4	18	30	71	118	46	21	6	1	52	16.51
8	135	5	10	14	24	44	30	6	2	-	29	21.48
9	56	2	2	9	14	15	8	5	1	-	13	23.21
10	32	-	3	4	10	7	6	1	1	-	7	21.88
11	17	-	1	3	2	8	3	-	-	-	4	23.53
12	/	-	-	2	1	3	1	-	-	-	2	28.57
13	4	-	-	-	2	1	1	-	-	-	-	0
14	3	-	-	-	2	1	-	-	-	-	-	0
15	2	-	-	-	1	-	-	1	-	-	-	0
16	1	-	-	-	-	1	-	-	-	-	-	0
Unk.	60	-	2	5	18	18	10	3	-	4	7	11.67

Tabl	e B 27.	Counts	of Liv	e Birth	•	irthwei siana,	•	aternal A	Age, and	d Mater	rnal Ra	ce	
						<u> </u>		weight					
Maternal Race and Age	Total	499 and less	500- 749 grams	750- 999 grams	1000- 1499 grams	1500- 1999 grams	2000- 2499 grams	2500- 2999 grams	3000- 3499 grams	3500- 3999 grams	4000- 4499 grams	4500 and over	Weight not stated
All races*	66773	179	290	272	693	1260	4074	13128	25503	16581	4081	699	13
Under 15 years	305	1	3	-	1	13	33	83	121	44	6	-	-
15-19 years	11989	43	60	49	151	262	972	2959	4726	2282	436	47	2
20-24 years	20415	45	90	98	212	363	1271	4291	7947	4873	1041	181	3
25-29 years	16952	49	69	61	143	295	853	2896	6473	4639	1266	203	5
30-34 years	11307	31	44	43	116	194	591	1851	4130	3231	907	168	1
35-39 years	4933	7	22	17	63	103	296	875	1807	1300	362	81	-
40-44 years	839	3	2	4	5	29	54	164	289	208	61	19	1
45 years & over	27	-	-	-	2	1	3	8	7	4	2	-	-
Not stated	6	-	-	-	-	-	1	1	3	-	-	-	1
White	37910	34	83	94	244	507	1677	6029	14530	11180	3010	517	5
Under 15 years	57	-	-	-	-	3	2	12	24	14	2	-	-
15-19 years	4811	5	10	12	30	70	269	931	1973	1217	264	30	-
20-24 years	10339	7	22	24	74	126	448	1783	4089	2930	710	124	2
25-29 years	11105	8	23	27	60	146	452	1644	4202	3391	993	158	1
30-34 years	7794	10	18	18	51	97	314	1090	2854	2493	717	131	1
35-39 years	3268	2	8	9	26	48	162	477	1208	985	282	61	-
40-44 years	516	2	2	4	2	16	28	86	175	147	41	13	-
45 years & over	18	-	-	-	1	1	2	6	4	3	1	-	-
Not stated	2	-	-	-	-	-	-	-	1	-	-	-	1
Black	27424	142	203	175	438	743	2312	6792	10394	5055	990	172	8
Under 15 years	247	1	3	-	1	10	30	71	97	30	4	-	-
15-19 years	7013	38	49	37	121	190	694	1986	2686	1027	166	17	2
20-24 years	9774	38	68	73	133	235	795	2432	3752	1880			1
25-29 years	5389	39	44	33	80	147	386	1167	2075	1123			4
30-34 years	3189	20	26	25	64	94	262	700	1142	654	166		
35-39 years	1510	5	13	7	35	54	118	365	535	289	71	18	
40-44 years	291	1	-	-	3	13	25	68	104	51	19	6	1
45 years & over	8	-	-	-	1	-	1	2	2	1	1	-	-
Not stated	3	-	-	-	-	-	1	1	1	-	-	-	-

[&]quot;All races" includes white, black, and other

Table I	B28. Co	unts an	d Perd	cents* o	f Live L	Births b Louisia			weight,	Infant S	Sex, a	nd Mate	ernal Ra	ace
Weight	AII R	aces		W	hite				ack			O	ther	
In Grams	Total	Percent	Male	Percent	Female	Percent	Male	Percent	Female	Percent	Male	Percent	Female	Percent
Under 500	179	0.27	17	0.09	17	0.09	65	0.47	77	0.57	3	0.39	-	-
500-749	290	0.43	42	0.22	41	0.22	115	0.83	88	0.65	2	0.26	2	0.30
750-999	272	0.41	43	0.22	51	0.27	79	0.57	96	0.71	3	0.39	-	-
1000-1499	693	1.04	126	0.65	118	0.64	204	1.46	234	1.73	5	0.65	6	0.90
1500-1999	1260	1.89	261	1.35	246	1.33	318	2.28	425	3.15	6	0.78	4	0.60
2000-2499	4074	6.10	750	3.87	927	5.00	1062	7.62	1250	9.27	36	4.67	49	7.34
2500-2999	13128	19.66	2663	13.76	3366	18.14	3095	22.21	3697	27.41	147	19.07	160	23.95
3000-3499	25503	38.19	7016	36.25	7514	40.50	5341	38.33	5053	37.46	311	40.34	268	40.12
3500-3999	16581	24.83	6175	31.90	5005	26.98	2919	20.95	2136	15.84	194	25.16	152	22.75
4000-4499	4081	6.11	1922	9.93	1088	5.86	629	4.51	361	2.68	56	7.26	25	3.74
4500+	699	1.05	338	1.75	179	0.96	106	0.76	66	0.49	8	1.04	2	0.30
Unknown	13	0.02	4	0.02	1	0.01	3	0.02	5	0.04	-	-	-	-
Total	66773	100	19357	100	18553	100	13936	100	13488	100	771	100	668	100

^{*}Percentages may not add to 100 due to rounding.

Gestational Age

Gestational age is the interval between the first day of the mother's last normal menstrual period and the date of birth. It is recorded on Louisiana's birth certificates by the physician attending the birth. Physicians use several different methods to estimate gestational age, including computing the interval between the first day of the mother's last normal menstrual period (LMP) and the date of birth, or determining a clinical estimate based on examination of the newborn. Standardized methods of measurement for determination of gestational age are difficult, especially among at-risk pregnancies in which minimal or no prenatal ascertainments have been made.

Louisiana birth certificates record both the "Date Last Normal Menses Began" and the "Clinical Estimate of Gestation." LMP is subject to error from imperfect maternal recall or misidentification of the last normal menstrual period because of postconception bleeding, delayed ovulation, or intervening early miscarriage. Therefore, the physician's clinical estimate of gestation is used to determine gestational age in this report.

A birth is considered *preterm* if the gestational age at delivery is less than 37 weeks.

There were 112 infants for whom no estimate of gestational age was recorded.

- 11.7% of all live births in Louisiana were estimated to be preterm (Table B29).
- Black mothers delivered preterm infants almost twice as frequently as white mothers (15.8% versus 8.7% of live births, respectively) (Table B29).
- Younger mothers (under 20) and older mothers (40 and older) delivered preterm infants more frequently than any other age groups (13.9% and 13.4% of live births, respectively) (Table B29).

Table B	29. Co	ounts and	d Perc	ents of F	Preteri	m Live B Louisia		less thar 998	1 37 w	eeks), by	/ Mate	ernal Age	and I	Race
	Maternal Age Group													
Maternal Race	Un	der 20	2	0-24	2	5-29 30-34			3	5-39	40 8	& Older	All Ages	
Nace	Num	Num Percent											Percent	
White	473	9.7	891	8.6	914	8.2	664	8.5	296	9.1	58	11.0	3296	8.7
Black	1212	2 16.7 1476 15.1 781 14.5 517 16.3 293 19.5 52 17.5 4332 15.8												
All Races*	1701	13.9	2405	11.8	1731	10.2	1204	10.7	617	12.5	115	13.4	7774	11.7

^{*&}quot;All Races" includes white, black, and other

Multiple Births

- 64,833 live births (97.1% of total live births) were part of a single delivery.
- 1,848 live births (2.8% of total live births) were part of a twin delivery, 86 (0.1%) were part of a triplet delivery, 5 live births were part of a quadruplet delivery.

Apgar Score

The *Apgar score* is a composite measure of the physical health of an infant shortly after birth. It is assessed at one and five minutes after birth, and is used to predict the infant's chances of survival. Five characteristics of the baby that are easily identifiable – heart rate, respiratory effort, muscle tone, reflex irritability, and color – are assessed on a scale of 0 to 2, with 2 being optimum. The Apgar score is the sum of these scores, with a score of 7 or higher indicating that the infant is in good physical condition, and a score of 10 being perfect. As the five-minute score is generally considered to be a better predictor of survival, it is the score that is reported here.

0.3% (225) of birth certificates had no Apgar score recorded.

- 12.4% (8,224) of live births received an Apgar score of 10, and 1.6% (1,040) of infants had low (0-6) Apgar scores (Tables B30 and B31).
- Age and racial breakdowns were consistent with low birthweight percentages; infants born to very young mothers, older mothers, and black mothers received the highest percentages of below normal scores (Tables B30 and B31).

with Belo	Table I ow Normal (0-6) Five-				ternal Age						
Maternal Age Group Count/Percent Under 20 20-24 25-29 30-34 35-39 40 & Older All A												
Number	257	300	241	147	77	18	1040					
Percent of Live Births 2.1 1.5 1.4 1.3 1.6 2.1 1.6												

	Normal (0-6) A	s and Percents Apgar Scores, I siana, 1998	of Births by Maternal Ra	асе									
Count/Percent Maternal Race													
	White	Black	Other	All Races*									
Number	347 675 18 1040												
Percent of Live Births 0.9 2.5 1.3 1.6													

^{*&}quot;All Races" includes white, black, and other

Abnormal Conditions of the Newborn

Abnormal conditions of the newborn are recorded on the birth certificate by checking any of 8 listed conditions, none, or other. More than one condition can be checked on a birth certificate.

- The two most commonly reported abnormal newborn conditions were assisted ventilation less than 30 minutes (at a rate of 6.2 per 1,000 live births) and assisted ventilation 30 minutes or more (at a rate of 5.4 per 1,000 live births).
- The third most commonly reported abnormal condition was hyaline membrane disease/respiratory distress syndrome, at a rate of 2.8 per 1,000 live births.

Table B32 gives detailed counts of abnormal conditions of the newborn by age and race of the mother.

Table B32. C	ounts	* of Al	onorm	al Co					wborn	, by N	latern	al Age	e and	Race		
					LOU	isian	a, 19		Matern	al Ago	Group					
Condition	Race	Total	Under	1		1			watern	ai Aye	эгоир				4E 0	
Condition	Auoc	7 Otal	15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
	All	62971	284	587	1307	2121	3223	3963	11201	19229	16075	10716	4650	787	24	5
None	White	35996	_	158					4506	9780	10605	7437	3111	489	15	1
110110	Black	25604	231	424	872	1296	1817	2133	6542	9164	5026	2967	1394	269	8	3
	Other	1371	1	5	15	24	56	53	153	285	444	312	145	29	1	1
	All	71	1	2	4	3	6	1	16		14	9	2	-	-	-
Anemia (HCT< 39/HGB < 13)	White	25		-	1	-	2	-	3	10	5	5	1	-	-	-
7 (101 × 00/110B × 10)	Black	43	-	2	3	3	4	1	13	16	9	4	1	-	-	-
	Other	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-
	All	55		-	-	3	3	5	11	14	15	12	2	-	-	-
Birth injury	White	30		-	-	-	1	1	2	8	11	8	1	-	-	-
,,	Black	23	1	-	-	3	2	4	9	6	3	4	-	-	-	-
	Other	2	-	-		-	-	-	-	-	1	-	1	-	-	-
	All	4	-	-	-	-	-	-	-	3	-	1	-	-	-	-
Fetal alcohol syndrome	White	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
,	Black	3	-	-	-	-	-	-	-	2	-	1	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	All	186	-	2	3	11	8	8	32	50	51	31	17	4	-	-
Hyaline membrane disease/	White	100	1	_	_	3	1	4	8	30	30	19	10	2	-	-
Respiratory distress syndrome	Black	82	-	2	3	7	7	4	23	20	20	12	5	2	-	-
	Other	4	-	-	-	1	-	-	1	-	1	-	2	-	-	-
	All	105		-	1	6	5		20	26	31	16	11	1	-	-
Meconium aspiration syndrome	White	39		-	-	1	3	3	7	7	13	6	5	1	-	-
	Black	65	-	-	1	5	1	5	12	19	18	10	6	-	-	-
*Th's 's and a second of the dead are set	Other	1	-	-	-	-	1	-	1	-	-	-	-	-	-	-

^{*}This is not an unduplicated count. More than one condition was noted on some birth certificates. (Table B32 continues on the next page)

Table B32. (con	tinued). C	Counts	s* of A	bnor		Cond isian			the Ne	wbor	n, by l	Materi	nal Ag	e and	Race	
									Matern	al Age	Group					
Condition	Race	Total	Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
Assisted ventilation less than 30 minutes	All White Black Other	415 234 176 5	-	10 3 7	7 1 6	15 5 10	29 11 17 1	24 15 9 -	35	_	62	76 49 27 -		7 4 3 -		- - -
Assisted ventilation 30 minutes or more	All White Black Other	362 181 172 9	- 1	4 4	6 2 4	13 2 11	18 9 9	10	62 23 39		87 54 31 2	52 30 20 2	14	3 3 - -		- - -
Seizures	All White Black Other	35 17 18	-	- - -	1 1 - -	1 - 1 -		3 1 2	5 2 3	9 5 4 -	11 5 6	7 4 3	2 1 1 -	1 - 1 -	- - -	- - -
Other	All White Black Other	2933 1411 1467 55	3 14	42 11 31	75 25 50	54	70	87	247 381	424 503	359 292	171	111 90	15	1 -	- - -
Unknown	All White Black Other	84 62 22	1	1 - 1 -	1 - 1 -	1 1 - -	2 - 2 -	1 - 1 -	6 1 5	12 9 3	15 11 4	27 23 4	13 9 4	7 5 2 -	2 2 -	1 1 - -

^{*}This is not an unduplicated count. More than one condition was noted on some birth certificates.

Congenital Anomalies

Congenital anomalies are recorded on the birth certificate by checking any of 21 listed anomalies, none, or other. More than one anomaly can be checked on a birth certificate. Because these events occur so infrequently, rates have been calculated for categories of anomalies.

- There were 638 birth certificates with at least one congenital anomaly reported (Table B33).
- The most commonly reported category of congenital anomalies was musculoskeletal/integumental anomalies at a rate of 18.9 per 10,000 live births. This includes cleft lip/palate, polydactyly/syndactyly/adactyly, clubfoot, and diaphragmatic hernia, as well as other musculoskeletal/integumental anomalies.
- The second most commonly reported category was circulatory/respiratory anomalies, which includes heart malformations, at a rate of 11.8 per 10,000 live births.
- The third most commonly reported category was central nervous system anomalies at a rate of 8.7 per 10,000 live births. This category includes anencephalus, spina bifida/meningocele, hydrocephalus, and microcephalus, as well as other central nervous system anomalies.

Table B33 gives detailed counts of congenital anomalies reported for 1998 births, categorized by maternal age.

Table B33. Counts* of	Congen		nalies siana,		e of An	omaly	and M	aterna	l Age	
				Mate	ernal Ag	e Grou	р			
Congenital anomaly	Total	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
Total	687	4	140	215	154	100	57	17	-	-
Anencephalus	6	-	2	2	-	-	1	1	-	-
Spina bifida/Meningocele	29	-	4	7	8	8	2	-	-	-
Hydrocephalus	8	1	-	2	2	3	-	-	-	-
Microcephalus	6	1	-	2	2	1	1	-	-	-
Other central nervous system anomalies	9	-	4	3	1	1	-	-	-	-
Heart malformations	38	-	4	11	9	8	5	1	-	-
Other circulatory/Respiratory anomalies	41	1	8	14	14	2	3	-	-	-
Rectal atresia/Stenosis	2	-	1	1	-	-	-	-	-	-
Tracheo esophageal fistula/Esophageal atresia	7	-	2	-	3	1	1	-	-	-
Omphalocele/Gastroschisis	15	-	6	6	2	1	-	-	-	-
Other gastrointestinal anomalies	7	-	-	4	2	-	-	1	-	-
Malformed genitalia	10	-	3	3	1	3	-	-	-	-
Renal agenesis	1	-	1	-	-	-	-	-	-	-
Other urogenital anomalies	20	•	6	4	5	2	2	1	-	-
Cleft lip/Palate	43	ı	9	12	5	9	7	1	ı	ı
Polydactyly/Syndactyly/Adactyly	32	1	7	11	4	6	2	1	-	ı
Club foot	31	-	4	12	10	5	-	-	-	-
Diaphragmatic hernia	3	-	-	1	1	-	1	-	-	-
Other musculoskeletal/integumental anomalies	17	1	3	3	5	3	3	-	-	-
Down's syndrome	18	1	1	3	6	1	4	2	-	-
Other chromosomal anomalies	11	-	-	4	-	2	3	2	-	-
Other congenital anomalies	333	1	75	110	74	44	22	7	-	-

^{*}This is not an unduplicated count, More than one congenital anomaly was noted on some birth certificates. 638 infants had at least one congenital anomaly.

DELIVERY CHARACTERISTICS: MEDICAL PROCEDURES, COMPLICATIONS, AND FACILITIES

Obstetric Procedures

The attendant at birth records obstetric procedures on the birth certificate by checking any of 6 procedures performed, none, or other. More than one procedure can be checked on a birth certificate.

- The most frequently performed obstetric procedure was electronic fetal monitoring, at a rate of 809.6 per 1,000 mothers who had 1 or more live births during the calendar year (Table B34).
 - Electronic fetal monitoring was done less often in black mothers than in white mothers, at a rate of 755.0 per 1,000 black mothers versus 851.7 per 1,000 white mothers, respectively (Table B34).
- The second most frequently performed procedure was ultrasound, at a rate of 625.5 per 1,000 mothers who had 1 or more live births during the calendar year (Table B34).
 - Ultrasound was done less often in black mothers than in white mothers, at a rate of 549.6 per 1,000 black mothers versus 678.5 per 1,000 white mothers, respectively (Table B34).
- Among the 65,815 women who had 1 or more live births, no associated obstetric procedures were performed in 6,445 cases.
 - Black mothers were more than twice as likely to have no obstetric procedures performed than white mothers, at a rate of 144.0 per 1,000 black mothers versus 64.2 per 1,000 white mothers, respectively (Table B34).

Table B34.	Counts ai	nd Rates		tric Pro ana, 19		y Mater	nal Age a	nd Rad	e					
			All Ag	jes				All R	aces**					
Procedure	All Ra	ces**	Whi	te	Bla	ck	Teer	ıs	35 and Older					
	Number Rate Number Rate Number Rate Number Rate Number Ra													
None	6445	98.0	2396	64.2	3888	144.0	1322	108.6	649	114.6				
Electronic Fetal Monitoring	53218	809.6	31776	851.7	20392	755.0	9631	790.9	4480	790.8				
Ultrasound	41116	625.5	25313	678.5	14844	549.6	7166	588.4	3586	633.0				
Stimulation of Labor	8953	136.2	5438	145.8	3306	122.4	1711	140.5	744	131.3				
Induction of Labor	8447 128.5 5739 153.8 2568 95.1 1513 124.2 644 113.7													
Tocolysis	722 11.0 496 13.3 191 7.1 138 11.3 49 8.6													
Amniocentesis	resis 461 7.0 285 7.6 171 6.3 35 2.9 183 32.									32.3				

^{*}Rate per 1,000 mothers who had 1 or more live births during the calendar year

Table B35 gives detailed counts of obstetric procedures reported for 1998 births, categorized by maternal age and race.

^{**&}quot;All Races" includes white, black, and other

		Tab	le B35.	Coun	ts* of		tric Pro Louisia			Materi	nal Age	and R	Race			
								Mate	rnal Ag	e Grou	ט					
Procedure F	Race	Total	Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
A	ΑII	6445	49	89	160	255	347	422	1273	1919	1432	1121	541	106	2	2
	Nhite	2396	7	12	15	42	66	107	242	559	652	603	285	48	-	-
None	3lack	3888	42	77	143	211	271	314	1016	1318	729	484	243	-	2	2
C	Other	161	-	-	2	2	10	1	15	42	51	34	13	6	-	-
A	ΑII	461	-	3	3	7	6	16	35	86	82	75	134	48	1	-
	Nhite	285	-	2	3	4	2	8	19	38	55	52	93	28	-	-
Amniocentesis _E	Black	171	-	1	-	2	4	8	15	48	25	23	40	19	1	-
C	Other	5	-	-	-	1	-	-	1	-	2	-	1	1	-	-[
Α	ΑII	53218	224	472	1096	1770	2735	3334	9407	16396	13728	8980	3820	640	20	3
Electronic fetal V	Nhite	31776	41	139	385	714	1228	1586	4052	8831	9367	6427	2630	412	15	1
monitoring B	Black	20392	183	329	703	1036	1462	1709	5239	7359	4022	2308	1072	204	4	1
	Other	1050	-	4	8	20	45	39	116	206	339	245	118	24	1	1
A	ΔII	8447	27	54	154	284	446	548	1486	2669	2224	1397	544	98	2	-
Induction of V	Nhite	5739	5	20	69	155	247	320	811	1744	1662	1047	402	66	2	-
labor	Black	2568	22	34	84	129	192	217	656	890	513	325	131	31	-	-
	Other	140	-	-	1	-	7	11	19	35	49	25	11	1	-	-
A	ΔII	8953	45	79	191	307	520	569	1666	2724	2240	1534	644	99	1	-
Stimulation of V	Nhite	5438	5	23	61	135	226	298	743	1499	1540	1125	461	64	1	-
labor	Black	3306	40	56	128	165	282	266	897	1188	619	371	160	31	-	-
i c	Other	209	-	-	2	7	12	5	26	37	81	38	23	4	-	- 1
Α	ΔII	722	2	4	12	25	43	52	136	232	184	119	42	7	-	-
V	Nhite	496	-	1	6	13	23	35	78	152	141	87	33	5	-	-
Tocolysis	Black	191	2	3	6	10	13	13	45	76	35	24	8	1	-	-1
	Other	35	-	-	-	2	7	4	13	4	8	8	1	1	-	-
A	ΔII	41116	167	343	761	1335	2044	2516	6999	12445	10755	7163	3077	494	15	1
V	Nhite	25313	39	112	300	591	965	1258	3226	6914	7490	5157	2156	320	10	1
Hitrocound	Black	14844	127	228	454	723	1042	1216	3663	5335	2950	1792	815	158	4	-1
l c	Other	959	1	3	7	21	37	42	110	196	315	214	106	16	1	-1
A	ΔII	751	3	8	12	27	42	46	135	236	178	118	71	9	1	-
	 White	397	1	4	5	9	9	16	43	112	120	74	43	3	1	-
Othor	Black	341	2	4	7	18	33	29	91	123	53	42	25	5	-	-
	Other	13	-	-	-	-	-	1	1	1	5	2	3		-	-1
Д	ΔII	78	1	1	2	3	2	2	10	9	12	22	13	8	2	1
	Nhite	55	1	-	-	2	-	1	3	6	8	19	9	6	2	1
Unknown	Black	23	-	1	2	1	2	1	7	3	4	3	4	2	-	-1
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-[

^{*}This is not an unduplicated count. More than one procedure was noted on some birth certificates. 65815 women had 1 or more live births during the calendar year.

Complications of Labor and/or Delivery

Complications of labor and/or delivery are recorded on the birth certificate by checking any of 15 listed complications, none, or other. More than one complication can be recorded on a birth certificate.

- The three most commonly reported complications of labor and/or delivery were moderate or heavy meconium (35.2 per 1,000 mothers), fetal distress (34.7), and breech/malpresentation (25.0) (Table B36).
- Rates varied considerably by race. The rates of moderate or heavy meconium and fetal distress were higher for black mothers (47.6 and 44.0 per 1,000 black mothers, respectively) than for white mothers (26.3 and 28.0, respectively), while the rate of breech/malpresentation was higher for white mothers (29.8) than for black mothers (18.5) (Table B36).
- Among the 65,815 women who had 1 or more live births, no complications of labor and/or delivery were recorded in 49,560 cases. White mothers more frequently reported no complications than black mothers, with a rate of 765.4 per 1,000 white mothers versus 738.8 per 1,000 black mothers, respectively (Table B36).

Table B36. Counts* and Rates* o	of Compli		s of Labo siana, 19		or Delive	ry by l	Maternal	Race a	nd Age	
			AII A	All Races**						
Complication	All Rac	es**	Whi	te	Blac	ck	Teer	าร	35 & O	lder
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
No complication noted	49560	753.9	28555	765.4	19953	738.8	9034	741.9	4325	762.2
Meconium, moderate/heavy	2314	35.2	982	26.3	1285	47.6	502	41.2	170	30.0
Fetal distress	2284	34.7	1044	28.0	1189	44.0	529	43.4	181	31.9
Breech/Malpresentation	1643	25.0	1113	29.8	499	18.5	247	20.3	181	31.9
Cephalopelvic disproportion	1425	21.7	924	24.8	473	17.5	277	22.7	100	17.6
Premature rupture of membrane (>12 hours)	821	12.5	410	11.0	394	14.6	194	15.9	72	12.7
Febrile (> 100 degrees F)	789	12.0	389	10.4	376	13.9	220	18.1	29	5.1
Precipitous labor (< 3 hours)	677	10.3	229	6.1	425	15.7	109	9.0	71	12.5
Dysfunctional labor	639	9.7	372	10.0	248	9.2	138	11.3	37	6.5
Abruptio placenta	218	3.3	97	2.6	119	4.4	39	3.2	21	3.7
Prolonged labor (> 20 hours)	180	2.7	88	2.4	85	3.1	30	2.5	13	-
Placenta previa	124	1.9	86	2.3	35	1.3	4	-	16	-
Other excessive bleeding	121	1.8	67	1.8	47	1.7	13	-	20	3.5
Cord prolapse	83	1.3	52	1.4	29	1.1	11	•	10	-
Seizures during labor	34	0.5	7	-	27	1.0	14	-	2	-
Anesthetic complications	24	0.4	11	-	12	-	2	-	4	-

^{*}This is not an unduplicated count. More than one complication was noted on some birth certificates. 65815 women had 1 or more live births during the calendar year

Table B37 gives detailed counts of labor and delivery complications reported for 1998 births, categorized by maternal age and race.

^{*}Rate per 1,000 mothers who had 1 or more live births during the calendar year

^{**&}quot;All Races" includes white, black, and other

[&]quot;-" indicates rate is unstable due to low frequency (<20)

Table B3	7. Cou	nts* of	Comp	licati			or and na, 19	98				al Age	e and	Race		
								Mat	ernal i	4ge Gr	oup					
Complication	Race	Total	Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
	All	49560	219	463	1014	1690	2520	3128	8815	15214	12568	8415	3695	611	19	4
No complication noted	White	28555	45	126	321	640	1074	1428	3589	7813	8325	5899	2489	381	13	1
No complication noted	Black	19953	174	334	685	1028	1406	1657	5110			2278			5	2
	Other	1052	-	3	8	22	40	43				238		21	1	1
	All	789	7	16	31	37	67	62		281	188	71	27	1	1	-
Febrile (> 100 degrees F)	White	389	2	5	8	8	25	31	77	131	119			-	1	-
r obino (> 100 dogroco i)	Black	376	5	11	22	29	39	30		146		22		1	-	-
	Other	24	-	-	1	-	3	1			7	5		-	-	-
	All	2314	21	28	75	95	127	156		761	550	330		29	1	1
Meconium,moderate/heavy	White	982	2	5	20	32	33	53			283	167	58	11	1	-
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Black	1285	19	23	55	63	90	100		436		153				1
	Other	47	-	-	-	-	4	3				10		2		-
Premature rupture of	All	821	3	12	25	33	61	60		242		128		8	-	-
membrane (>12 hours)	White	410		5	10	16		22				75		4	-	-
(* . =	Black	394	3	7	14	17	36	38				49		4	-	-
	Other	17	-	-	1		2		3			4		-	-	-
	All	218	3	2	2	7	13	12				46				-
Abruptio placenta	White	97	1	1	1	_	6	6		21	22	29		3	-	-
	Black	119	2	1	1	7	7	6	22	41	27	16		3	-	-
	Other	2	-	-	-	-	-	-	_	1	-	1		-	-	-
_, ,	All	124	-	-	-	1	1	2		28		36		6	1	-
Placenta previa	White	86	-	-	-	1	1	2	4	14		29		5	1	-
	Black	35	-	-	-	-	-	-	-	14	10	7	4		-	-
	Other	3	-	-	-	-	-	-	-	- 45	2	-	-	1	-	-
	All White	121	-	1	3	-	5	4						4	1	-
Other excessive bleeding	White Black	67 47	-	1	-	-	2	2 2		21	18 7			3	1	-
	Other	47 7	-	-	3	-	2 1		1	22 2		6 4		l '	-	-
	All	34	2		2	2	5	3		12		4	2	-	_	_
Coi-uras durina labar	White	34 7	2	-	2	4	5	ა 1		2		_	2	_	-	-
Seizures during labor	Black	27	2	-	2	1	5	2	2 10	10		_		_	-	-
	Other	21	_	_	_		5	_	10	10	5	_	_]	_	
	All	677	2	14	9	18	20	46	107	237	154	106	61	10		
Precipitous labor	White	229		3	1	10	4	8		77		47		5	_	
(< 3 hours)	Black	425		11	8	16								5		
,	Other	23			-	1	-	1							_	_
	All	180		_	4	4	9								1	
Prolonged labor	White	88		_	1	2	1	6							1	_
(> 20 hours)	Black	85		_	3	2	7	7						l 1	_	_
,	Other	7	_	_	-	_	1	_	1	3		2		_	_	_
	All	639	6	6	12	33	31	50		235		75		5	-	_
Dysfunctional labor	White	372	1	_	5	18										_
	Black	248		6	7	15						23				_
	Other	19		_	_	-	_		-	8		5		1	_	_
	All	1643	5	10	20	38	77	97	242			341		33	1	_
	White	1113		4	9	20										_
Breech/Malpresentation	Black	499		6	11	18										_
	Other	31	-	_	_	-	1	1							_	_

^{*}This is not an unduplicated count. More than one complication was noted on some birth certificates. 65815 Women had 1 or more live births during the calendar year.

(Table B37 continues on the next page)

Table B3	7. Cou	nts* of	Comp	licati		f Labo Duisia			elivery	, by N	latern	al Age	e and	Race		
							10., 10		ernal A	Age Gr	oup					
Complication	Race	Total	Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
	All	1425	6	11	21	56	84	99	271	420	386	242	87	13	-	-
Control of the discourse of the	White	924	-	2	11	22	43	54	132	270	291	167	57	7	-	-
Cephalopelvic disproportion	Black	473	6	9	9	33	41	44	136	145	84	73	24	5	-	-
	Other	28	_	-	1	1	-	1	3	5	11	2	6	1	-	-
	All	83	1	2	1	1	4	2	10	26	19	17	9	1	-	-
	White	52	-	1	1	1	1	1	5	15	12	14	5	1	-	-
Cord prolapse	Black	29	1	1	-	-	3	1	5	11	7	3	2	-	-	-
	Other	2	-	-	-	-	-	-	-	-	-	-	2	-	-	-
	All	24	-	-	2	-	-	-	2	10	7	1	4	-	-	-
	White	11	-	-	1	-	-	-	1	5	3	1	1	-	-	-
Anesthetic complications	Black Other	12	-	-	1	-	-	-	1	5	4	-	2	-	-	-
	All	2284	16	25	78	78	159	173	513	739	495	340	148	30	3	
	White	1044	10	6	28	18		60		309	285			19		_
Fetal distress	Black	1189	15	19	49	60	101	113	-	419	194	146		9	2	-
	Other	51	-	-	1	-	3	-	4	11	16	14	4	2	-	-
	All	8317	36	93	181	288	431	512	1505	2521	2121	1412	615	105	2	-
	White	4555	4	21	67	117	161	214	580		1327	930			1	-
Other	Black	3560	31	70	110	168	255	289		1221	728	437	216	_	1	-
	Other	202	1	2	4	3	15	9			66			6	-	-
	All	81	1	-	1	4	4	2	11	17	16		10	4	-	1
	White	55	1	-	-	2	1	-	3	12	12	16	7	3	-	1
Unknown	Black Other	25 1	-	-	1	2	3	2	8	5	4	4	3	1	-	_
	Other	T I	-	-	-	-	-	-	-	-	-	ı ı	ı -		-	-

^{*}This is not an unduplicated count. More than one complication was noted on some birth certificates. 65815 Women had 1 or more live births during the calendar year.

Method of Delivery

- 26.0% of all live births in Louisiana were cesarean deliveries (Table B38), compared with 21.2% for the United States.
- Final 1998 data collected by the National Center for Health Statistics report that Louisiana had the second highest rate of cesarean deliveries in the country.
- Cesarean deliveries occurred more frequently among white mothers than among black mothers, at 26.8% versus 25.1% of live births, respectively (Figure B15, Table B38).
- Use of cesarean deliveries increased with age; black mothers aged 40 and older had the highest use, at 37.0% of live births (Figure B15, Table B38).

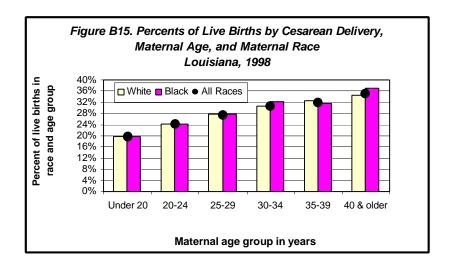


	Table B38. Percents of Live Births by Cesarean Delivery, Maternal Age, and Maternal Race Louisiana, 1998												
Maternal	rnal Maternal Age Group												
Race	Under 20	Inder 20 20-24 25-29 30-34 35-39 40 & Older All Ages											
White	19.6	24.2	27.7	30.5	32.5	34.4	26.8						
Black	19.8	19.8 24.1 27.7 32.1 31.5 37.0 25.1											
All Races*	19.7	24.1	27.5	30.8	32.0	35.2	26.0						

^{*&}quot;All Races" includes white, black, and other

Table B39 gives detailed counts of method of delivery by race and age group among the 65,815 Louisiana residents who gave birth.

	Table	B39.	Coun	ts* o				liver a, 199		/latern	al Age	e and	Race			
Mothod	Dana	Tatal						М	aterna	I Age	Group					
Method	Race	Total	LT 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	<i>4</i> 5 +	Unk.
	All	43512	219	467	1001	1643	2400	2894	8405	13673	10857	6870	2990	484	11	3
.,	White	24204	44	123	306	616	993	1275	3313	6814	7039	4734	1956	296	8	-
Vaginal	Black	18308	174	339	687	1005	1361	1576	4968	6650	3498	1910	933	170	2	3
	Other	1000	1	5	8	22	46	43	124	209	320	226	101	18	1	-
	All	2395	16	25	64	96	164	176	525	721	629	362	119	23	-	-
	White	1713	1	12	33	54	95	111	305	514	501	284	91	17	-	-
Vaginal/Forceps	Black	625	15	13	30	41	67	62	213	194	106	67	25	5	-	-
	Other	57	-	-	1	1	2	3	7	13	22	11	3	1	_	-
	All	111	-	2	3	8	15	13	41	29	21	15	5	_	_	-
Vaginal/Forceps	White	81	_	1	2	5	6	10	24	22	18	13		_	_	_
& Vacuum	Black	29	_	1	1	3	8	3	16	7	3	2	1	_	_	_
	Other	1	_	_	_	_	1	_	1		_	_	-	_	_	_
	All	1381	14	21	41	66	111	111	350	462	281	181	83	10	_	_
	White	767	1	5	11	33	42	56	147	255	182	125	51	6		
Vaginal/Vacuum	Black	586	13	16	30	33	68	53	200	205	86	52	27	3		
	Other	28	13	10	30	55	1	2	3	203	13	4	5	1		
	All	920	-	-	-	-	20	38	70	301	254	201	84	10	_	-
			-	1	3	8			-			_			-	-
Vaginal birth after previous c-section	White	443	-	-	-	2	4	7	13	111	135	119	58	7	-	-
previous c-section	Black	466	-	1	3	6	16	31	57	189	114	79	24	3	-	-
	Other	11	-	-	-	-	-	-		1	5	3	2	-	-	-
Vaginal birth after	All	78	-	-	-	1	3	1	5	11	21	28	8	5	-	-
previous c-section/	White	53	-	-	-	-	1	-	1	5	17	21	5	4	-	-
forceps	Black	24	-	-	-	1	2	1	4	6	4	6	3	1	-	-
	Other	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Marchael bloth after	All	3	-	-	-	-	-	-	-	1	1	1	-	-	-	-
Vaginal birth after previous c-section/	White	3	-	-	-	-	-	-	-	1	1	1	-	-	-	-
Forceps/Vacuum	Black	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	All	42	-	1	1	-	-	2	4	11	16	9	1	1	-	-
Vaginal birth after previous c-section/	White	21	-	-	-	-	-	1	1	2	13	4	-	1	-	-
Vacuum	Black	20	-	1	1	-	-	1	3	9	3	4	1	-	-	-
	Other	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	All	10007	49	103	229	381	591	699	2003	2939	2483	1645	720	161	6	1
Primary c-section	White	5654	8	28	85	130	259	331	833	1534	1672		446	89	3	-
i ililary c-section	Black	4148	41	75	138	247	324	361	1145	1356	750	537	251	65	3	-
	Other	205	-	-	6	4	8	7	25	49	61	39	23	7	-	1
	All	6749	-	3	19	29	75	177	303	1819	2003	1703	794	120	6	1
Donast a continu	White	4143	-	1	3	9	22	59	94	892	1294	1217	562	80	3	1
Repeat c-section	Black	2505	-	2	16	20	51	118	207	910	679	455	214	37	3	-
	Other	101	-	-	-	-	2	-	2	17	30	31	18	3	-	-
	All	617	7	15	25	36	48	54	178	187	108	89	32	12	3	1
.	White	281	3	1	8	6	12	21	48	82	62	57	17	8	3	1
Unknown	Black	321	4	14	17	30	35	32	128	100	44	28	14	3	-	-
	Other	15	-	-	-	-	1	1	2	5	2	4	1	1	-	-

^{*65815} Women had 1 or more live births during the calendar year.

Attendant at Birth

The vast majority of births took place in hospitals and were attended by physicians. There were no racial differences in either of these delivery characteristics (Tables B40 and B41).

Table B40	Table B40. Counts and Percents of Birthing Facilities by Maternal Race Louisiana, 1998											
Birthing	Birthing White Black All Races*											
Facility	Number	Percent	Number	Percent	Number	Percent						
In Hospital	38361	99.7	26986	99.4	66797	99.5						
Out of Hospital	131	0.3	170	0.6	303	0.5						

^{*&}quot;All Races" includes white, black, and other

Table B41. Counts and Percents of Birth Attendants by Maternal Race Louisiana, 1998											
Birth	Wh	ite	Bla	ack	All Ra	aces**					
Attendant	Number	Percent	Number	Percent	Number	Percent					
Physician	37405	98.7	26498	96.6	65308	97.6					
Midwife	395	1.0	623	2.3	1044	1.8					
Other*	110	0.3	303	1.1	421	0.6					

^{*}Includes unclassifiable birth attendant data **"All Races" includes white, black, and other